

WHAT IS CLAIMED IS:

1. A traction compound having the following formulae

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wherein A is a residue of a compound having from 1 to 10 active hydrogen atoms, B is a residue of a cycloalkene oxide having from 4 to 12 carbon atoms, or a cycloaliphatic epoxide having from 4 to 12 carbon atoms, and n is 1 to 10, with the proviso that n can be less than the number of active hydrogen atoms in compound.

10 2. The traction compound according to Claim 1 wherein the residue of said compound having n number of active hydrogen atoms is the residue of water, a primary, secondary or tertiary aliphatic alcohol having from 1 to 10 carbon atoms, cycloalkyl alcohol, or glycol.

15 3. The traction compound according to Claim 2 wherein the residue of said compound having n number of active hydrogen atoms is the residue of methyl alcohol, ethyl alcohol, propyl alcohol, butyl alcohol, cyclopropyl methanol, cyclobutanol, cyclobutane methanol, cyclopentanol, cyclopenten methanol, cyclohexanol, cyclohexyl methanol, cycloheptanol, cycloheptene methanol, cyclooctanol, cyclooctene methanol, cyclodecanol, ethylene glycol, propylene glycol, 1,4-butanediol, 2,3-butanediol, 1,2-pentane diol, 1,4-pantanediol, 1,5-pantanediol, diethylene glycol, triethylene glycol, 20 tetraethylene glycol, dipropylene glycol, tetrapropylene glycol, dibutylene glycol, tributylene glycol, tetrabutylene glycol, 2,2-dimethyl-1,3-propanediol (neopentyl glycol), 2,3-dimethyl-2,3-butanediol (pinacol), Bisphenol A, 1,2- and 1,3-cyclopentenediol, 1,4-cyclohexenediol, 1,2- and 1,5-cyclooctenediol, cyclohexane dimethanol, glycerin, trimethylolpropane, or pentaerythritol or sorbitol.

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4. The traction compound according to Claim 3 wherein the residue of said compound having n number of active hydrogen atoms is the residue of cyclohexanol, 2,3-butanediol, trimethylolpropane, or monoethyleneglycol.

5. The traction compound according to any one of Claims 1-5 wherein B is the residue of cycloalkylene oxide having from 4 to 12 carbon atoms, or cycloaliphatic oxide having from 4 to 12 carbon atoms.

5 6. The traction compound according to any one of Claims 1-5 wherein B is the residue of ethylene oxide, propylene oxide, 1,4-butylene oxide, 2,3-butylene oxide, cyclobutene oxide, cyclopentene oxide, cyclohexene oxide, cycloheptene oxide, cyclooctene oxide, cyclododecene oxide, 1,2,3,4-diepoxybutane, 1,2,5,6-diepoxyoctane, or 1,2,7,8-diepoxyoctane.

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7. The traction compound according to any one of Claims 1-5 wherein B is the residue of commercially available traction compound

8. A traction fluid composition comprising

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(a) a traction compound having the following formulae



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wherein A is a residue of a compound having from 1 to 10 active hydrogen atoms, B is a residue of a cycloalkene oxide having from 4 to 12 carbon atoms, or a cycloaliphatic epoxide having from 4 to 12 carbon atoms, and n is 1 to 10, with the proviso that n can be less than the number of active hydrogen atoms in compound A, and

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(b) low viscosity base stock traction fluid, or any mixture thereof.

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10. The traction fluid composition according to Claim 8 wherein the residue of said compound having n number of active hydrogen atoms in Formula I is the residue of water, a primary, secondary or tertiary aliphatic alcohol having from 1 to 10 carbon atoms, cycloalkyl alcohol, or glycol.

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11. The traction fluid composition according to Claim 10 wherein the residue of said compound having n number of active hydrogen atoms in Formula I is the residue of methyl alcohol, ethyl alcohol, propyl alcohol, butyl alcohol, cyclopropyl methanol,

cyclobutanol, cyclobutane methanol, cyclopentanol, cyclopenten methanol, cyclohexanol, cyclohexyl methanol, cycloheptanol, cycloheptene methanol, cyclooctanol, cyclooctene methanol, cyclodecanol, ethylene glycol, propylene glycol, 1,4-butanediol, 2,3-butanediol, 1,2-pentane diol, 1,4-pantanediol, 1,5-pantanediol, 5 diethylene glycol, triethylene glycol, tetraethylene glycol, dipropylene glycol, tetrapropylene glycol, dibutylene glycol, tributylene glycol, tetrabutylene glycol, 2,2-dimethyl-1,3-propanediol (neopentyl glycol), 2,3-dimethyl-2,3-butanediol (pinacol), Bisphenol A, 1,2- and 1,3-cyclopentenediol, 1,4-cyclohexenediol, 1,2- and 1,5-cyclooctenediol, glycerin, trimethylolpropane, or pentaerythritol or sorbitol.

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12. The traction fluid composition according to Claim 11 wherein the residue of said compound having n number of active hydrogen atoms in Formula I is the residue of cyclohexanol, 2,3-butanediol, trimethylolpropane, or monoethyleneglycol.

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13. The traction fluid composition according to any one of Claims 8-12 wherein B in Formula I is the residue of cycloalkylene oxide having from 4 to 12 carbon atoms, or cycloaliphatic oxide having from 4 to 12 carbon atoms.

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14. The traction fluid composition according to any one of Claims 8-13 wherein B in Formula I is the residue of cyclobutene oxide, cyclopentene oxide, cyclohexene oxide, cycloheptene oxide, cyclooctene oxide, cyclododecene oxide, or 1,2,5,6-diepoxyoctane.

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15. The traction compound according to any one of Claims 8-14 wherein B in Formula I is the residue of a commercially available traction compound.

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16. The traction fluid composition according to any one of Claims 8-15 further comprising an antioxidant additive, a corrosion inhibitor, a copper deactivator, an anti-wear additive, an extreme pressure additive, anti-foam additive, a viscosity modifier, or a dye.

17. A process for the preparation of a traction compound having the following formulae

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 AB_n

(I)

wherein A is a residue of a compound having from 1 to 10 active hydrogen atoms, B is a residue of a cycloalkene oxide having from 4 to 12 carbon atoms, or a cycloaliphatic epoxide having from 4 to 12 carbon atoms, and n is 1 to 10, with the proviso that n can be less than the number of active hydrogen atoms in compound A, which process

5 comprises reacting a cycloalkylene oxide having from 4 to 12 carbon atoms or a cycloaliphatic epoxide having from 4 to 12 carbon atoms with a compound having from 1 to 10 active hydrogen atoms in the presence of a polymerization catalyst.